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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,943	11/22/2000	Thomas Gassenmeier	H 4325	1228

7590

08/01/2002

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EXAMINER

DOUYON, LORNA M

ART UNIT

PAPER NUMBER

1751

DATE MAILED: 08/01/2002

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

HCT
Application No.

09/718,943

Applicant(s)

GASSENMEIER ET AL.

Examiner

Lorna M. Douyon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-12, 14-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-12, 14-16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 8, 2002 has been entered.
2. Claims 10-12, 14-16 and 18-19 are pending.

Specification

3. The abstract of the disclosure is objected to because it need not recite "The present invention relates to" in line 1. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities:
 - a. the disclosure lacks section headers, in particular a section containing a brief description of the drawing;
 - b. page 6, lines 6-17 contains non-English language which would be unnecessary upon submission of a corrected drawing.

Appropriate correction is required.

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Claim Objections

5. Claim 16 is objected to because of the following informalities: "aluminosilicates" in line 3 is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. Claims 10-12 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is indefinite because it is not clear whether "c" is "0.5 length units to 20 length units" as stated in lines 12-13 or whether the upper limit is "10" as argued by Applicants in their response on April 10, 2002 at page 4, lines 4-5 and 19-20.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 10-11, 14-16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mittelstrass et al. (DD 140987).

Mittelstrass teaches a continuous production of granulated detergents and cleaning agents in fluidized bed apparatus wherein 85 parts of a mixture of $\text{Na}_5\text{P}_3\text{O}_{10}$ (95% phase II, bulk density 1000 g/l, 80% particle with diameter <0.2 mm) 40, Na_2CO_3 10, Na_2SO_4 25.8, Na perborate 14,

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and additives 10.2% is fluidized and sprayed with 15 parts 10:7 dodecylbenzenesulfonic acid-fatty acid mixture to prepare dust-free granules with bulk density 530 g/l (see abstract). Considering the amount of the acid mixture, the amount of the alkaline mixture and the particle size of the phosphate, it would be inherent in the dust-free granules of Mittelstrass to satisfy the recited formula. Hence, Mittelstrass anticipates the claims.

11. Claims 10, 14, 16 and 18-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dorset et al. (US Patent No. 5,486,317), hereinafter "Dorset".

Dorset teaches a process for making a detergent particle which comprises neutralization of the acid form of an anionic surfactant in a high shear mixer by a stoichiometric excess of finely divided particulate neutralizing agent having an average particle size of less than 5 μm (see abstract). In Example A, Dorset teaches a process making a detergent agglomerate comprising charging powders like 21% carbonate, median particle size of 3.4 μm (<50%) and 4.2 μm (<90%) to an Eirich mixer, adding and mixing liquid ingredients: 23% C11-C13 linear alkyl benzene sulphonic acid and 2% phosphonic acid and the resultant agglomerates are subsequently made into finished product (see col. 6, line 23 to col. 8, line 15). Considering the proportions of the carbonate and liquid ingredients and the particle size of the carbonate, it would be inherent in

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the detergent particle of Dorset to satisfy the recited formula. Hence, Dorset anticipates the claims.

12. Claims 10, 12, 14-16 and 18-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Riddick et al. (US Patent No. 5,573,697), hereinafter "Riddick".

Riddick teaches a continuous process for producing high active, high density detergent granules consisting essentially of preparing a mixture in a high-speed mixer, the mixture consisting essentially of about 15% to about 35% by weight anionic surfactant acid, about 5% to about 65% by weight phosphate builder having a median particle size from about 10 microns to about 50 microns, about 10% to about 65% by weight particulate carbonate having a median particle size from about 1 micron to about 40 microns; agglomerating the mixture in a moderate-speed mixer from about 20 seconds to about 300 seconds (see claim 1; col. 3, lines 1-3, 12-19). In Examples 1-8, Riddick teaches a process for preparing detergent granules as above wherein the anionic surfactant acid has an average of about 12 or 13-14 carbon atoms (see col. 5, line 34 to col. 6, line 40). Considering the proportions of the carbonate and anionic surfactant acid and the particle size of the carbonate, it would be inherent in the detergent granules of Riddick to satisfy the recited formula. Hence, Riddick anticipates the claims.

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13. Claims 10-12, 14-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al. (WO 92/17404), hereinafter "Block".

Block teaches a mixture consisting of 92.5 wt% sodium percarbonate (0.2 to 0.8 mm) coated with 7.5 wt% of a 1:1 mixture of C₈₋₁₀ fatty acids and technical stearic acid which is free-flowing and is used in a detergent composition containing sodium dodecylbenzenesulfonate, tallow alcohol ethoxylate, sodium carbonate, and enzymes, among others (see abstract, Examples on page 8). Block, however, fails to specifically teach the value of "c" in the recited formula.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the particle size of the percarbonate through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

14. Claims 10-12, 14-16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baillely (GB 2,337,054).

Baillely teaches an effervescence particle comprising an anhydrous perborate coated with a coating agent (see abstract), wherein the coating agent is preferably polymers or copolymers of

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maleic acid, acrylic acid and/or methacrylic acid; fatty acids having a carbon chain length from C12 to C22 and C8-C13 dicarboxylic acids (see page 3, lines 29-40; page 4, line 20) at a level from 0.3% to 20% by weight of the particle (see page 4, lines 40-43). Baillely also teaches that the coating agent is applied in liquefied form, that is a molten coating agent which is applied at a temperature above its melting point (see page 4, lines 25-31). Baillely also teaches that the particle has a particle size between 10 microns and 2 cm, preferably such that 80% by weight of the particles has a particle size of more than 75 microns and less than 10% by weight of the particles has a particle size of more than 0.5 cm (see page 5, lines 11-23). Baillely also teaches Particle B comprising sodium perborate and sodium carbonate coated with 3% MA/AA, MW 4000 (copolymer of 1:4 maleic/acrylic acid) (see pages 35-36). Baillely also teaches incorporating this particle to a detergent composition, see Examples 1-3. Baillely, however, fails to specifically disclose the particle size of Particle B.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization of results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215,

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219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Response to Applicants' Arguments

15. Applicant's arguments filed on May 8, 2002 and April 10, 2002 have been fully considered but they are not persuasive.

With respect to the anticipation rejection based upon DD '987, Applicants argue that when the value of c is solved using the data given at the abstract, c=15 which is outside the claimed range of 0.5 to 10.

The Examiner respectfully disagrees with the above argument because the value of c which is 15 would still read on the present amended claim 10 which requires 0.5 to 20 length units (see lines 12-13 of the claim).

With respect to the obviousness rejection based upon DD '987, Applicants argue that there is no suggestion to select and balance the dimensions and acid content of the granules as required by the invention.

The Examiner respectfully disagrees with the above argument because it is clear that DD '987 teaches the proportions of the acidic and alkaline components as well as the particle size of the alkaline components and these teachings provide sufficient motivation to arrive at the present claims.

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With respect to the obviousness rejection based upon Block, Applicants argue that the reference does not suggest the relationship of acid concentration and particle dimension required by the claims, nor does it suggest forming particulate composition consisting essentially of such particles. Applicants also argue that it is not disclosed what the particle size distribution is within the range of 0.2 to 0.8 mm in the examples.

The Examiner respectfully disagrees with the above argument because Block teaches the proportions of the sodium percarbonate, the particles size of 0.2 to 0.8 mm and the proportions of the fatty acids, and as stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the particle size of the percarbonate through routine experimentation for best results.

With respect to the obviousness rejection based upon Baillely, Applicants argue that this reference does not show any recognition of the significance of the relationship between the amount of acid coating and particle size.

The Examiner respectfully disagrees with the above argument because Baillely teaches the effervescent particle having a particle size between 10 microns and 2 cm, preferably from 200 microns to 3000 microns on page 5, lines 12-23 and the acid coating at a level of 0.3% to 20% on page 4, lines 40-43 and based on these teachings the value of "c" would overlap those recited.

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16. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references are considered cumulative to or less material than those discussed above.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (703) 305-3773. The examiner can normally be reached on Mondays-Fridays from 8:00 AM to 4:30 PM.

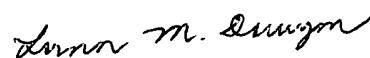
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Technology Center is:

(703) 872-9311 - for Official After Final faxes

(703) 872-9310- for all other Official faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.

July 25, 2002



Lorna M. Douyon
Primary Examiner
Art Unit 1751